

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

POLLUTION PREVENTION

ELECTRIC VEHICLES - UTILITY CARTS

LEAD ACTIVITY

Naval Air Station (NAS) North Island

STATUS

Active

MISSION

Reduce air emissions through the use of electric vehicles

REQUIREMENT

In order to comply with the goals of the Energy Policy Act, an alternative form of transportation is required on Navy bases. Vehicles that produce zero air emissions could be used to provide local transportation for Navy personnel.

DESCRIPTION

NAS North Island began integrating zero emissions alternative-fuel vehicles (ZEV) in 1993, in order to comply with the goals of the Energy Policy Act. In addition to the electric vans and pickup trucks already in use at NAS North Island, utility carts have been introduced. The electric utility cart, a two-seat electric vehicle, is designed for short-distance residential travel; it produces virtually no air emissions. The Neighborhood Electric Vehicle (NEV) was developed by Bombardier, a Canadian corporation engaged in design, development, manufacturing, and marketing activities in the fields of transportation equipment, civil and military aerospace, motorized consumer products and other related services.



Bombardier NEV

The NEV runs on an electric motor fed by lead batteries that can be recharged using a residential 110-volt outlet. Approximately eight hours are required to fully charge a battery from zero charge. The vehicle weighs 1,300 pounds, has a 25-to 40-mile range, and reaches a maximum speed of 30 miles per hour (mph). The carts are locally approved for city streets for speeds up to 45 mph.

NAS North Island purchased two carts in October 1997 for local transportation, including round trips from NAS North Island to Naval Amphibious Base (NAB) Coronado. Each NEV costs about \$7,500. Another NEV cart was purchased in September 1998 for use by the Commanding Officer and the Public Affairs Officer. Carts similar to the NEV carts have been used by NADEP for several years with great success. Over 110 carts are currently in use at the NADEP facility. NAS North Island will begin tracking usage of the NEVs in the future.

BENEFITS

- Uses standard electrical outlet for charging
- Reduces the consumption of petroleum
- Produces zero emissions
- Maintenance-free batteries and strong performance record

ACCOMPLISHMENTS/CURRENT STATUS

Date	Activity
OCT 1997	Two NEVs purchased for use at NAS North Island
SEP 1998	One additional NEV purchased at NAS North Island
NOV 1998	Began collecting usage data

FUTURE PLAN OF ACTION & MILESTONES

Date	Activity
Ongoing	Compile usage data

COLLABORATION/TECHNOLOGY TRANSFER

Bombardier Motorized Consumer Products Group manufactures the utility carts. NADEP used the carts previously and continues to do so. NAS North Island now uses the electric carts on the base.

BIBLIOGRAPHY

- Bombardier web site: Bombardier NEV Press Release.

RELATED GOVERNMENT INTERNET SITES

[DOE Office of Transportation Technologies](#)
[EV World](#)

RELATED NAVY GUIDEBOOK REQUIREMENTS

- 10003 Cost Effective Waste Reduction

UPDATED: 01/23/02